

tory tract is the usual entrance of the infection. Taking into consideration only those cases in which a pure culture was obtained, it was found that out of 76 tuberculous cases, 75, or 98.68 per cent., were of the human type, and 1, or 1.32 per cent., was of the bovine type of tuberculosis. Two other cases of presumably the bovine type were discovered. The investigation supports the statement of R. Koch that the danger in childhood from the bovine type of the disease fades into insignificance in comparison to the danger from the human type of bacillus.

Venous Murmurs Heard at the Root of the Neck in Children.—CAREY COOMBS (*Brit. Jour. Child. Dis.*, 1911, viii, 109) has investigated the venous hum in children described by Eustace Smith as a sign of tuberculosis of the mediastinal lymph glands. One hundred connective cases were studied, ranging from one to fifteen years of age. Out of this number, 51 exhibited the murmur. The murmur occurred twenty-six times in 42 boys, and twenty-five times in 58 girls; 50 per cent. of the murmurs were found in children under two years, 58 per cent. from two to five years, 76.6 per cent. from six to ten years; and 50 per cent. from eleven to fifteen years. Excepting in a few cases of anemia it is unusual to find this murmur in persons over sixteen years old. The murmur is heard at and just below the sternoclavicular articulations. The following facts were demonstrated: If bilateral, the murmur is louder on the right side. If unilateral, it is more often on the right side. With the head thrown back the murmur becomes more audible and lateral rotation has the same effect. The murmur usually disappears in the recumbent position. It is usually louder during inspiration, and louder during cardiac diastole more often than during systole, but it is accentuated at the beginning of each phase. It is low-pitched, usually, and reminiscent of the chlorotic "bruit de diable." The murmur is not especially associated with tuberculous adenitis within the thorax, as shown by its presence fifty-one times in 100 non-tuberculous children, its presence in many children who have never been ill, and its absence in a number of cases with intrathoracic tuberculous glands. It cannot be regarded as a sign of any gross organic change. Probably in some cases of fever and anemia the murmur may appear as do bruits at the cardiac base. The murmur is certainly venous and is heard over the internal jugular veins in the neck and over the innominate veins beneath the manubrium. It is produced in the internal jugular vein, but the mechanism is not clear. Although associated with anemias and febrile states, it is heard also in perfectly healthy children. It is not associated with tuberculosis, and is of no diagnostic value.

The Difference Between the Manifestations of Rheumatism in Childhood and Adult Life.—J. BOYD BARRETT (*Brit. Jour. Child. Dis.*, 1911, viii, 113) points out that rheumatism in childhood differs from the adult form in the variety of its manifestations, in its insidious onset, in the mildness of its arthritic symptoms, and in the severity of the cardiac conditions. Its manifestations in children are given as myocarditis, endocarditis, pericarditis, rheumatic nodules, muscular rheumatism, erythematous eruptions, chorea, pleurisy, and tonsillitis. Hyperpyrexia and acute polyarthritis are rarely found in childhood,

being associated with the adult form. The mild arthritic and the mild primary form with endocarditis are the most important to recognize in children, to avoid irreparable injury. Wasting is one of the effects of advanced cardiac disease subsequent to rheumatic endocarditis, often without a history of joint inflammation. Anemia is a complication more frequent in children than in adults. Rheumatic nodules are associated with and diagnostic of the disease in children. They are often found in young adults, occurring on the ears. They are almond-shaped, hard and freely movable, and occur beneath the skin over bony points, such as the olecranon and patella. Their structure is fibrous, the fibers being arranged concentrically. They are associated with endocarditis. In rheumatic tonsillitis the diagnosis is often provisional. Tonsillitis is occasionally followed by arthritis and rather often by endocarditis and pericarditis. Wachenheim gives 60 per cent. of cases with cardiac lesions out of 113 cases of rheumatism in children. McCrae gives 3.7 per cent. of cases of rheumatism, showing tonsillitis, and Hammerschmidt gives 50 per cent. Preponderance of opinion favors the association of chorea with rheumatism, and this makes a further difference between the child and the adult. In cardiac rheumatism, the earliest phenomena is usually an acute dilatation of the left ventricle, a diffuse or weakened cardiac impulse, a feeble first sound at the apex, and an accentuation of the pulmonic and sometimes the aortic second sound. Clinical experience shows that the acute dilatation of the left ventricle is present in even mild attacks of subacute rheumatism. The treatment includes early and prolonged rest in bed, and full doses of the salicylates with bicarbonate of soda. The administration of digitalis is an important part of the treatment. Rheumatism in any form is rare under two or three years. It is most frequent between six and nine years.

The Value of Lumbar Puncture and the Leukocyte Count in Infantile Paralysis.—JOHN LOVETT MORSE (*Archives of Pediat.*, 1911, xxviii, 164) reviews the results of lumbar punctures in this disease by various investigators. From these data he concludes that during the acute stage of this disease the cerebrospinal fluid is clear and occasionally under pressure; that a fibrin clot is often present, which may persist for several weeks; that the fluid always contains an excess of cells, chiefly of the mononuclear type, most of them being lymphocytes; and that these changes are present before the appearance of the paralysis. These changes, however, are identical with those found in tuberculous meningitis. In the latter case, it is true, the cerebrospinal fluid contains the tubercle bacilli, but these are missed in the majority of cases under the usual routine examination. If they are not found, the examination of the fluid is of no value in a differential diagnosis. Lumbar puncture is of great value in differentiating early anterior poliomyelitis from early cerebrospinal meningitis, as the characteristics are so different in the two diseases—in the latter the fluid being turbid or purulent, and containing many polynuclear cells and often meningococci. The value of lumbar puncture in the early diagnosis of anterior poliomyelitis is very limited. The results of the leukocyte counts in this disease have not been uniform. Morse quotes the leukocyte counts taken in 9 cases. There was never a diminution of the white